

REMARKS

Claims 1-32 are pending and under consideration.

ITEMS 7-8: ALLOWABLE SUBJECT MATTER

Claims 27-32 are allowed. (Action at page 6).

Claims 8-11 and 20-25 are indicated to be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims. (Action at page 6).

Applicants appreciate the indications of allowable subject matter. However, claims 8-11 and 20-25 are not rewritten to independent form, since patentability is submitted to reside in the independent claim 7 and from which claims 8-11 depend and in the independent claim 12 and from which claims 20-25 depend.

ITEM 2: REJECTION OF CLAIMS 1-6 AND 12-18 UNDER 35 U.S.C. §102(b) AS BEING ANTICIPATED BY FUKAKUSA (U.S.P. 5,535,088)

As provided in MPEP §706.02 entitled Rejection on Prior Art, anticipation requires that the reference must teach every aspect of a claimed invention. Fukakusa does not adequately support an anticipatory-type rejection by not describing features recited in the present application's independent claims.

Load Beam Movable Up And Down Not Described

Independent claim 1 recites a load beam supported by an actuator arm and movable both up and down and in radial directions.

The Examiner contends that the load beam of the present application is described by the element labeled 80 i.e., slider holder 80 in Fukakusa. (Action at page 2). However, neither the slider holder 80 described by Fukakusa, or any other element, is supported by an actuator arm, serves as a load beam, and is both movable up and down and in a radial direction. For example, Fukakusa describes (col. 10, lines 2-10):

arm 90 can move in directions across tracks of an optical recording medium 110. A slider holder 80 for pressing and supporting the floating slider 30 is fixed to an end of the arm 90. The slider holder 80 is fixed to the arm 90 by caulking a caulking element 86 formed in a fixing plate 85 to the arm 90 via a fixing hole 91 formed in the end portion of the arm 90.

The slider holder 80 has: a pressure spring 84 for pressing the floating slider 30 at a constant pressure. . .

(Emphasis added). That is the slider holder is not a load beam that is movable up and down.

Since features of independent claim 1 are not described by the cited art, Applicant requests reconsideration and withdrawal of the rejection of independent claim 1 and claims 2-6 dependent therefrom.

Load Beam Movable In Radial Direction Relative To Actuator Arm Not Described

Claim 12 recites a load beam supported by an actuator arm and having a first end movable in a radial direction relative to a movement of the actuator arm.

The slider holder 80 described in Fukakusa, which the Examiner contends describes the load beam of the present invention, does not move in a radial direction relative to an actuator arm. Rather, Fukakusa describes (col. 12, lines 30-31) that:

slider holder 80 is fixed to the arm 90 by caulking to a caulking element 86 formed in a fixed plate 85 to the arm 90.

(Emphasis added).

In addition, dependent claim 15 recites an intermediate region flexible to enable movement of the load beam in a radial direction relative to the actuator arm. Applicant respectfully submits that Fukakusa describes no such region to enable such a movement. The Examiner contends such features are described by spring 87. (Action at page 3). However, Fukakusa describes (col. 13, lines 41-46) the spring 87 as only enabling a movement of a floating slider, not of a load beam:

floating slider 30 is elastically supported by the tracking-mechanism supporting spring 87 formed in the slider holder 80 such that the floating slider 30 can move in the tracking-driving direction.

Since features of independent claim 12 are not described by the cited art, Applicant requests reconsideration and withdrawal of the rejection of independent claim 12 and claims 12-18 dependent therefrom.

ITEM 3: REJECTION OF CLAIM 7 UNDER 35 U.S.C. §102(b) AS BEING ANTICIPATED BY PARK ET AL. (U.S.P. 5,793,407)

Optical Pickup Including Light Source Not Described

Claim 7 recites an optical reading and/or writing system including an optical pickup focusing a light beam to form a light spot on a recording surface of the optical disk, the optical pickup comprising a light source emitting the light beam.

The Examiner contends these features are described by the element labeled 14 in Park i.e., mirror 14 and light source 1. (Action at page 4). However, even assuming *arguendo* that the mirror 14 describes the optical pickup as the Examiner contends, Park describes (col. 4, lines 3-5) only an "exterior light source (not shown)." That is, the light source in Park is not included in the optical pickup as recited in claim 7. Further, such a distance to an exterior light source does not facilitate the feature recited in claim 7, wherein "an optical loss between the light source and the optical path changing unit is suppressed."

Since features of claim 7 are not described by the cited art, Applicant requests reconsideration and withdrawal of the rejection of claim 7.

ITEM 4: REJECTION OF CLAIM 26 UNDER 35 U.S.C. §102(b) AS BEING ANTICIPATED BY BREZOCZKY (U.S.P. 5,351,229)

Light Source Mounted On Actuator Arm Not Described

Optical Fiber Connecting Light Source And Optical Path Changing Unit Not Described

Claim 26 recites an optical system used with an optical disk including a light source mounted on the actuator arm assembly, generating the light beam, and an optical fiber connecting the light source and a optical path changing unit, transferring the light beam from the light source to the optical path changing unit.

The Examiner contends that Brezoczky describes an:

optical pickup inherently mounted on the actuator assembly including a light source (43) . . . and an optical fiber (93) for connecting the light source and the optical path changing unit (82) and transferring the light beam from the light source to the optical path changing unit.

(Action at page 4).

Applicants respectfully submit that these features are not described by Brezoczky. Instead, Brezoczky only describes (col. 7, line 24-27):

system 40 basically comprises a semiconductor laser 43, including collimating optics, generating a collimated laser beam 44,. . . a rigid suspension arm 49 supporting an optical slider 51. . .

That is, as shown in FIG. 4, the laser in Brezoczky is a light source that is not mounted on an actuator arm.

Further, although Brezoczky describes an optical fiber, Brezoczky does not describe any of these fibers as connecting a light source and an optical path changing unit and transferring the light beam from the light source to the optical path changing unit. Brezoczky describes (col. 9, lines 13-15,) only utilizing:

optical fibers 93, 95 with integrated optical elements including the polarizing means 84, mirror 86, beam splitter 89 and beam analyzer 88.

Since features of claim 26 are not described by the cited art, Applicant requests reconsideration and withdrawal of the rejection of claim 26.

ITEMS 5-6: REJECTION OF CLAIM 19 FOR OBVIOUSNESS UNDER 35 U.S.C. §103(a) BY FUKAKUSA IN VIEW OF PARK AND CAMPBELL (U.S.P. 5,432,763) OR ADMITTED PRIOR ART (APA)

Claim 19 is rejected for obviousness by Fukakusa in view of Park and further in view of Campbell or APA FIGS. 1 or 2. (Action at page 5). The Action concedes that Fukakusa does not describe an optical pickup as recited in claim 19, and that both Fukakusa and Park do not teach a use of a light source mounted on an actuator arm as recited in claim 19. (Action at page 5).

Prima Facie Obviousness Not Established

No Motivation Or Reasonable Expectation of Success Stated Within the Cited Art To Combine In The Manner Proposed By The Examiner

As provided in MPEP §2143 entitled Basic Requirements of a *Prima Facie* Case of Obviousness:

The teaching or suggestion to make the claimed combination and the reasonable expectation of success must both be found in the prior art, not in applicant's disclosure. *In re Vaeck*, 947 F.2d 488, 20 USPQ2d 1438 (Fed. Cir. 1991).

The Examiner contends these features are described by Campbell or APA and that it would have been obvious to modify Fukakusa in use of a light source mounted on an actuator arm to "make the whole system of Fukakusa more compact." (Action at page 5).

However, Fukakusa describes in detail reasons for the light emitting device being separated that are counter to a combination in a manner as suggested by the Examiner:

An optical head formed in an integral fashion has a problem arising from heat generation of a light emitting device. Heat can change the wavelength of light, which results in an increase in aberration, and thus results in an increase in the minimum spot size of light. Furthermore, heat can produce noise called mode hopping noise which results in degradation in the signal-to-noise ratio of a signal. In the worst case, heat generation can destroy devices. To avoid the above problems, the optical head of the present embodiment has a cooling plate 18 fixed to a face of the substrate 10 opposite to the face on which the light emitting device 11 is disposed.

Since *prima facie* obviousness has not been established, the rejection of 19 should be withdrawn.

Conclusion

There being no further outstanding objections or rejections, it is submitted that the application is in condition for allowance. An early action to that effect is courteously solicited.

Finally, if there are any formal matters remaining after this response, the Examiner is requested to telephone the undersigned to attend to these matters.

If there are any additional fees associated with filing of this Amendment, please charge the same to our Deposit Account No. 19-3935.

Respectfully submitted,

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